WHAT IS CLAIMED IS

1. A nasal sound detection method, comprising the steps of:

capturing a voice signal;

calculating a fundamental frequency of the voice signal;

calculating a divisional frequency based on the fundamental frequency to divide the voice signal into a high-frequency band and a low-frequency band;

calculating powers of the high-frequency band and the low-frequency band; and

calculating a voice low-frequency to high-frequency ratio (VLHR) based on the ratio of the power of the high-frequency band to the power of the low-frequency band.

2. The nasal sound detection method of Claim 1, wherein the fundamental frequency is a first formant frequency in frequency domain transformed from the voice signal by Fourier transformation.

3. The nasal sound detection method of Claim 1, wherein the divisional frequency is the product of the fundamental frequency and a ratio factor.

4. The nasal sound detection method of Claim 1, wherein the divisional frequency is between 500-2100 Hz.

5. The nasal sound detection method of Claim 1, wherein the power of the low-frequency band and the power of the high-frequency band are the sum of the powers of frequencies within the low-frequency band and the sum of the powers of frequencies within the high-frequency band, respectively.

6. The nasal sound detection method of Claim 3, wherein the

ratio factor is a square root of a product of adjacent integers.

7. The nasal sound detection method of Claim 3, wherein the ratio factor is one of $\sqrt{6}$ and $\sqrt{12}$.

8. The nasal sound detection method of Claim 1, wherein the sampling frequency of the voice signal is not smaller than 20KHz.

9. The nasal sound detection method of Claim 2, wherein the frequency of Fourier transformation is larger than 10 times per second.

10. A nasal sound detection apparatus, comprising:

a microphone for capturing a voice signal;

a computer, including:

an audio capturing card for digitally sampling the voice signal; and

a program for calculating a fundamental frequency and a divisional frequency of the voice signal so as to calculate a VLHR of the voice signal; and

a monitor for displaying the variation of the VLHR.

11. The nasal sound detection apparatus of Claim 10, wherein the program employs Fourier transformation to transform the voice signal into a frequency domain signal so as to calculate the fundamental frequency and the divisional frequency of the voice signal.

12. The nasal sound detection apparatus of Claim 10, wherein the sampling frequency of the audio capturing card is not smaller than 20KHz.

13. The nasal sound detection apparatus of Claim 11, wherein he frequency of the Fourier transformation is larger than 10 times per second.